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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/556,822	11/15/2005	Alcardo Chezzi	2541-1039	1708
<small>465</small> YOUNG & THOMPSON 209 Madison Street Suite 500 ALEXANDRIA, VA 22314			<small>7590</small> EXAMINER CADU'GAN, ERICA E	
			<small>ART UNIT</small> 3726	<small>PAPER NUMBER</small>
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

## Application No.

10/556,822

## Applicant(s)

CHEZZI ET AL.

## Examiner

Erica E. Cadugan

## Art Unit

3726

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 15 November 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 November 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-85/86)  
Paper No(s)/Mail Date 11/15/05.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Drawings*

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the “tool extraction system” of claim 1 (noting that the trimmer as shown does not actually include any sort of “tool extraction system”; i.e., structure of some sort that actually performs the action of extracting or removing the tool 30 from the bead trimmer); the “production line...” of claim 1, lines 1-2 (in the event that the “production line” is intended to be positively recited in the claim); the “tool-bearing turret” of at least claims 1, 2, and 8 (noting that a tool holding structure 2 is shown, but does not actually appear to be a turret as such is typically defined; i.e., does not appear to be any sort of pivotally indexable member including a plurality of tools at the periphery thereof such that the turret indexes a desired one of the tools into a working position, nor, at the very least, does member 2 appear to hold multiple tools) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the

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renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Claim Objections***

2. Claims 1-2, 6, and 8 are objected to because of the following informalities: in claim 1, line 7, and in claim 8, it appears that "transversal" should be --transverse--; in claim 2, last line, and in claim 6, line 3, it appears that "centring" should be --centering--. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 1-8 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The preamble of claim 1 indicates that the bead trimmer has a "tool extraction system". However, the specification as originally filed does not appear to disclose any structure for performing any tool extraction.

Instead, the tool 30 is movable between a working position (shown in Figure 2) and a position wherein the tool is removed enough from the working position that it can be easily changed in an undisclosed manner. Thus, the bead trimmer as disclosed does not actually include any sort of “tool extraction system” (i.e., structure of some sort that actually performs an extraction or removal of the tool 30 from the bead trimmer), but is instead arranged and configured to be able to move the tool to a position where it may be more easily “extracted” from the tool holder 2 of the bead trimmer, i.e., teaches a bead trimmer that is constructed and/or arranged so as to facilitate a tool extraction, but doesn’t actually teach any structure that performs the tool extraction and thus does not teach any “tool extraction system”.

Also, the claims as originally filed (see at least claims 1-2 and 8) set forth a tool-bearing turret 2 for removably fixing a bead-trimmer tool 30. However, the tool holding structure 2 does not appear to actually be a turret as such is typically defined. It is noted that tool turrets are generally pivotally indexable members including a number of tools at the periphery thereof such that the turret indexes a desired one of the tools into a working position. At the very least, a turret holds multiple tools, which does not appear to be the case with the tool holding structure 2 of the present invention.

Also, as originally filed, aside from the many antecedent basis issues arising from the claim depending from claim 1 (when claim 1 as filed did not include any of the slides, for example), claim 3 as filed sets forth that the wheels 6 are conformed in such a way as to “prevent the intermediate slide 34 from displacing along the horizontal direction y and along the vertical direction z”. However, this does not appear to be accurate. Note that the intermediate slide 34 does move in the horizontal y direction relative to the second slide 4 via the use of the calibration

mechanism 16 as described in at least page 3, lines 23-26, and additionally, it appears that since intermediate slide 34 is affixed to second slide 4, when second slide 4 displaces in the vertical direction z, that intermediate slide 34 also \*does\* displace along the vertical direction z. However, page 3, lines 15-17 set forth that the wheels 6 are conformed in such a way as to prevent displacement of the \*first\* (emphasis added) slide 3 in direction x and along direction z (presumably, with respect to direction z, they only prevent movement in that direction (z) of the first slide 3 that is relative to the intermediate slide 34, as opposed to preventing vertical movement of the first slide 3 in general, as it would appear that the first slide 3 is mounted to intermediate slide 34, which is mounted to second slide 4, which moves vertically along the guides 8). See the proposed Examiner's Amendment of March 2008 for suggestions as to how this may be overcome.

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 1-8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1-8 are replete with instances that do not particularly point out and distinctly claim the subject matter of applicant's invention. Examples of these instances are listed below, but these instances are not limited to the listed examples. Applicant is advised to closely review the claims for other occurrences. It is noted that a detailed Examiner's Amendment was proposed on March 19, 2008. Attention is directed to that proposal for suggestions on how to overcome the issues with respect to 35 USC 112.

Regarding claim 1, line 1, the phrase "preferably" renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention.

In claim 1, line 2, it is unclear as set forth in the claim (via the use of the indefinite article "an") whether "an element" is intended to be a subset of or different from the "elements" previously set forth in the claim. If, as it appears, it is intended to be a subset thereof, Examiner suggests using language such as "one of the elements" rather than "an element" for clarity.

In claim 1, line 3, it is unclear as set forth in the claim to what "it" refers.

Where applicant acts as his or her own lexicographer to specifically define a term of a claim contrary to its ordinary meaning, the written description must clearly redefine the claim term and set forth the uncommon definition so as to put one reasonably skilled in the art on notice that the applicant intended to so redefine that claim term. *Process Control Corp. v. HydReclaim Corp.*, 190 F.3d 1350, 1357, 52 USPQ2d 1029, 1033 (Fed. Cir. 1999). The term "tool-bearing turret" or "turret" in at least claims 1, 2, and 8 is used by the claims to mean "tool holder", while the accepted meaning is "a pivotally indexable member including a number of tools at the periphery thereof such that the turret indexes a desired one of the tools into a working position", or, at the very least, a "positionable tool holder for holding multiple tools". The term is indefinite because the specification does not clearly redefine the term.

There are several positively recited limitations that lack sufficient antecedent bases in the claims. Some examples of this are: "which horizontal direction" in claim 1, line 7 (previously "at least one..."); "the weld bead" in claim 2 (multiple occurrences) (previously plural); "the intermediate slide" in claim 2; "the vertical direction" in claim 2 (previously "at least one..."); etc. This is not meant to be an all-inclusive list of such occurrences. Applicant is required to

review the claims and correct any other such occurrences of limitations lacking sufficient antecedent basis. Note, for example, that there are a number of dependent claims depending from claim 1 and including limitations to "the first slide", "the intermediate slide", and/or "the second slide", but that claim 1 doesn't include any reference to any "slide". A similar situation occurs in claim 4, noting that claim 4 depends from claim 2, and thus "the wheels" lacks sufficient antecedent basis in the claim. A similar situation exists in claim 8, i.e., there are a number of issues of limitations lacking sufficient antecedent basis because claim 8 depends from claim 6 (rather than claim 7), and thus there is insufficient antecedent basis for the limitations relating to the "blocking and unblocking cylinder" and structure related thereto.

As set forth in the claims, there is no frame of reference provided for determining what is meant by "correct" in the claim limitation "correct centring" in claim 2, nor in claim 6, i.e., it is unclear as claimed what constitutes a "correct" centering.

In claim 2, line 3, it is unclear, via the use of the indefinite article "a", whether "a horizontal direction" is intended to be the same as or different from the horizontal direction or directions previously set forth.

In claim 3, line 2, the limitation "guide" lacks a modifying article such as "a" or "the", rendering it unclear what "guide" is being referred to. Examiner suggests inserting --a-- prior to "guide" for clarity.

Claim 5 sets forth a "second actuator cylinder". However, no "first" or other actuator cylinder has been set forth in the claim (neither in the text of claim 5 itself, nor in the text of claim 1 from which claim 5 depends and thus includes), rendering it unclear how many "actuator cylinders" are intended to be encompassed by the claim.



In claim 5, "the bearing structure" lacks sufficient antecedent basis in the claim.

In claim 7, lines 2-3, it is unclear, via the use of the indefinite article "a", whether "a internal position" is intended to be the same as or different from the "internal position" previously set forth in the claim. If, as it appears, they are intended to be the same internal position, Examiner suggests changing "a internal position" to --the internal position-- or --said internal position--.

In claim 7, "the first guide" lacks sufficient antecedent basis in the claim.

***Claim Rejections - 35 USC § 102***

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1-2, and 6, as best understood, are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Pat. No. 5,131,136 to Uchida et al.

Uchida et al. teaches a machining device wherein a machine tool (see at least Figure 1 and title of invention, for example) has a spindle 17 for attachment of a tool 18 used to machine a workpiece placed on table 12 (see Figure 1, and col. 3, lines 1-20, for example). Note that table 12 (and thus the workpiece or "element" attached thereto) moves in the direction designated by Uchida as "X", which extends perpendicularly to the plane of the paper with respect to Figure 1 (col. 3, lines 1-20, Figure 1).

Regarding the device being a "bead trimmer", it is noted that the rotating (note the use of the tool spindle 17) machine tool 18 taught by Uchida is considered to be inherently capable of

performing this function (i.e., of trimming a bead from a workpiece), noting that the machining tool is blind as to the workpiece on which it operates (i.e., the tool doesn't care what kind of workpiece it machines – it has machining structure so it machines whatever workpiece the machining structure contacts). Additionally note that “[i]nclusion of material or article worked on by a structure being claimed does not impart patentability to the claims.” *In re Young*, 75 F.2d 966, 25 USPQ 69 (CCPA 1935) (as restated in *In re Otto*, 312 F.2d 937, 136 USPQ 458, 459 (CCPA 1963)). See also MPEP section 2115.

Also, regarding the “longitudinal axis” of the workpiece, it is noted that Uchida's machining device is inherently capable of machining a workpiece whose longitudinal axis is parallel to the X direction of Figure 1, simply by placing the workpiece on the table 12 such that the longitudinal axis of the workpiece is parallel to the described X direction.

Additionally, the spindle 17 includes structure for holding a tool 18 therein, which structure itself and/or the spindle 17 is considered to constitute the claimed “tool-bearing turret”, insofar as the described “turret” 2 of the present invention is considered to be a “turret”.

Also, the tool holding “turret” 17 and/or the tool-holding structure of 17 is supported by “means for translating the turret” on command (note the device is a CNC or numerically controlled device, and thus, responsive to “commands”, see at least Figure 5) according to at least one vertical direction (shown in Figure 1 as W, for example, see at least Figure 1) and at least one horizontal direction (shown in Figure 1 as Y, see at least Figure 1, for example), wherein the horizontal direction Y is transverse with respect to the described “longitudinal” shown X direction (Figure 1). Note that the tool “turret” is movable between an “internal” working position, i.e., a position that is above table 12 (see Figure 1), and an “external tool-

changing position” that is outside of the “working zone” of the tool 18 relative to the table 12 (note that the “turret” moves in the shown Y direction along the cross rail 14 to a tool changing position proximate tool change equipment 21 that is labeled “ATC POSITION” in Figure 1, see also col. 3, lines 20-28, for example).

Re claim 2 as originally filed, note that element 15 corresponds to the “first slide”, and element 16 can be considered the claimed “intermediate slide”. Note that “intermediate slide” 16 is considered to be “associated to”, as broadly claimed, the “first slide” 15, and to a “second”, vertically-movable slide 14 (see Figure 1, also col. 3, lines 1-20) that slides along “bearing structure” (any of 13 or 11, for example). Note also that the “intermediate slide” 16 is “mobile” along the horizontal Y direction with respect to the “second slide” 14 in order to “enable” a “correct centering of the tool” 18 with respect to the workpiece mounted on table 12.

Re claim 6, note that the “intermediate slide” 16 is mobile along the horizontal direction shown in Figure 1 as Y with respect to the “second slide” 14, and that whatever structure exists to cause this movement (one or a combination of any portion of the drive structure that moves the slide 16 relative to the slide 14 as shown in Figure 1 and/or the portion of the numerical control arrangement that causes this movement, for example) is considered to constitute a “calibration mechanism” as broadly claimed. Note that such structure is considered to “enable” the “correct centring” or desired positioning of the tool at least by virtue of the numerical control.

### ***Conclusion***

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Erica E. Cadugan whose telephone number is (571) 272-4474. The examiner can normally be reached on Monday-Thursday, 5:30 a.m. to 4:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David P. Bryant can be reached on (571) 272-4526. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Erica E Cadugan/  
Primary Examiner  
Art Unit 3726

eec  
August 13, 2008